

Assigned DOGM File No.: S 0470095
DOGM Lead: Jan Morse
Permit Fee \$ 150.00 Ck # 1674

Task ID# 2258

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1594 West North Temple Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801
Telephone: (801) 538-5291 Fax: (801) 359-3940

NOTICE OF INTENTION TO COMMENCE SMALL MINING OPERATIONS

The informational requirements of this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1987, and the General Rules as promulgated under the Utah Minerals Regulatory Program.

"Small Mining Operations" mining operations which have a disturbed area of five or less surface acres at any time.

I. GENERAL INFORMATION (Rule R647-3-104)

1. Name of Mine: RLR Site #4
2. Legal name of entity (or individual) for whom the permit is being requested: Red Leaf Resources, Inc.
Mailing Address: 6985 Union Park Center, Suite 375
City, State, Zip: Cottonwood Heights, Utah 84047
Phone: 801-878-8100 Fax: 801-878-8101
E-mail Address: jpatten@ecoshale.com
Type of Business: Corporation (X) LLC () Sole Proprietorship (dba) ()
Partnership () General _____ or limited _____
Or:
Individual ()

Entity must be registered (and maintain registration) with the State of Utah, Division of Corporations (DOC) www.commerce.utah.gov.

Are you currently registered to do business in the State of Utah? X Yes No

Entity # 6542120-0143

If no, contact www.commerce.utah.gov to renew or apply.

Local Business License # (if required)

Issued by: County _____ or City _____

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3.

Contact Person(s)

Name: Dr. James W. Patten Title: CEO
Address: 6985 Union Park Center, Suite 375
City, State, Zip: Cottonwood Heights, Utah 84047
Phone: 801-878-8100 Fax: 801-878-8101
Emergency, Weekend, or Holiday Phone: _____
E-mail Address: jpatten@ecoshale.com

Contact person to be notified for: permitting (X) surety (X) Notices (X) (please check all that apply)

Name: Same as above Title: _____
Address: _____
City, State, Zip: _____
Phone: _____ Fax: _____
Emergency, Weekend, or Holiday Phone: _____
E-mail Address: _____

Contact person to be notified for: permitting () surety () Notices () (please check all that apply)

Registered Utah Agent (as identified with the Utah Department of Commerce) (if individual leave blank):

Name: Todd Dana
Address: Same as above
City, State, Zip: _____
Phone: 801-878-8100 Fax: 801-878-8101
E-mail Address: td@ecoshale.com

Other

Name: Laura Nelson
Address: Same as Above
City, State, Zip: _____
Phone: 801-878-8105 Fax: 801-878-8101
Email: lnelson@ecoshale.com

4.

**If Business is a: Sole Proprietor:
Sole Proprietor:**

Name of Owner: _____ Title: _____
Business Address: _____
City, State, Zip: _____
Phone: _____ Fax: _____
E-mail Address: _____

If Business is a Corporation:

Name of Officers:

Dr. James W. Patten Title: President, CEO
Todd Dana Title: Chairman, COO _____

Title: _____
Title: _____

Headquarters Address: 6985 Union Park Center, Suite 375
City, State, Zip: Cottonwood Heights, Utah 84047
Headquarters Phone: 801-878-8100 Fax: 801-878-8101
E-mail Address: jpatten@ecoshale.com

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If Business is a Limited Liability Company: Member Managed () Manager Managed ()

Name of 1st Member/Manager: Title:

Business Address:

City, State, Zip:

Phone: Fax:

E-mail Address:

Name of 2nd Member/Manager:

Business Address:

City, State, Zip:

Phone: Fax:

E-mail Address:

If Business is a Partnership:

Name of Partner:

Business Address:

City, State, Zip:

Phone: Fax:

E-mail Address:

5. **Ownership of Land Surface:**

Private (Fee) () Public Domain (BLM) () National Forest (USFS) ()

State Trust Land/School Sections (X) State Sovereign Lands ()

Other (please describe): _____

Name Address

Name Address

Name Address

6. **Ownership of Minerals:**

Private (Fee) () Public Domain (BLM) () National Forest (USFS) ()

State Trust Land/School Sections (X) State Sovereign Lands ()

Other (please describe): _____

Name Address

Name Address

Name Address

BLM Lease or Project File Number(s) and/or USFS assigned Project Number(s):

BLM Claim Number(s):

Utah State Lease Number(s): 48808.0

Name of Lessee(s): Red Lead Resources, Inc.

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7. **Have the above surface and mineral owners been notified in writing?**

Yes (X) No ()

If no, why not?

Please be advised that if State Trust Lands are involved, notification to the Division of Oil, Gas and Mining alone does not satisfy the notification requirements of Mineral Leases upon

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4. **Will any water, liquid chemicals, reagents, or other solutions be used, produced or discharged as part of the mining or milling process?**
Yes () No (X) If yes, please describe (add extra pages if needed)
5. **Provide a brief description of the proposed mining operation and onsite processing facilities** (add extra pages if necessary). **ATTACHED**
6. () **New Road(s):** Length (ft)_____Width (ft)_____
7. (X) **Improved Road(s):** Provide a description of the improvements that need to be made to existing roads to access the site, including the Length (ft) and Width (ft) of improvements.
Existing Road: Atchee Ridge
Length (ft)___80___Width (ft)___30___
8. **Total project surface acreage to be disturbed: (5 acres) PLEASE SPECIFY EXACT ACREAGE - (this will be used to determine surety bond amount – see #VI).**
9. **Proposed startup date of project** (month, year):_____May 2008_____
10. **Proposed completion date of project, if known** (month, year)___November 2012___

IV. OPERATION AND RECLAMATION PRACTICES (Rule R647-3-107, 108 & 109)

The reclamation and operation obligation is to keep the area clean and safe, minimize hazards to public safety, return the land to a useful condition, and reestablish at least 70 percent of the premining vegetative ground cover. To accomplish this, the Permittee / Operator will need to perform reclamation concurrently, or at the completion (within one (1) year) of mining. Please refer to The Practical Guide to Reclamation in Utah, available at www.ogm.utah.gov.

1. *Keep the mining operation in a safe, clean, and environmentally stable condition.*
2. *Permanently seal all shafts and tunnels to prevent unauthorized or accidental entry.*
3. *Plug drill holes with a five foot cement surface plug. Holes that encounter fluids are to be plugged in the subsurface to prevent aquifer contamination.*
4. *Construct berms, fences, or barriers, when needed, above highwalls and excavations.*
5. *Remove, isolate, or neutralize all toxic materials in a manner compatible with federal and state regulations.*
6. *Remove all waste or debris from stream channels.*
7. *Dispose of any trash, scrap metal, wood, machinery, and buildings.*
8. *Conduct mining activities so as to minimize erosion and control sediment.*
9. *Reclaim all roads that are not part of a permanent transportation system.*
10. *Stockpile topsoil and suitable overburden prior to mining.*

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11. Stabilize highwalls by backfilling or rounding to 45 degrees or less, where feasible; reshape the land to near its original contour, and redistribute the topsoil and suitable overburden.

12. Properly prepare seedbed to a depth of six inches by pocking, ripping, discing, or harrowing. Leave the surface rough.

13. Reseed disturbed areas with adaptable species. (The Division recommends a mixture of species of grass, forb, and browse seed, and will provide a specific species list if requested.)

14. Plant the seed with a rangeland or farm drill, or broadcast the seed. Fall is the preferred time to seed.

V. VARIANCE REQUEST (Rule R647-3-110)

Any variance request must be approved in writing by the Division

Yes () No (X)

Any planned deviations from Rules R647-3-107, Operation Practices, R647-3-108, Hole Plugging Requirements, or R647-3-109, Reclamation Practices, as summarized above (see **IV. Operation and Reclamation Practices** Item # 1-14), should be identified below listing applicable rule number. Give justification for the variance(s) and alternate methods or measure to be utilized. A variance shall be granted if the alternative method or measure proposed will be consistent with the Act.

1st Variance Requested

Item # _____ Applicable Rule # (i.e. R647-3-109.10 (if you did not want trenches & pits reclaimed) _____
Justification: _____
Alternate methods or measure to be utilized: _____

2nd Variance Requested

Item # _____ Applicable Rule # _____
Justification: _____
Alternate methods or measure to be utilized: _____

3rd Variance Requested

Item # _____ Applicable Rule # _____
Justification: _____
Alternate methods or measure to be utilized: _____

Attach additional page if more variances are requested.

VI. SURETY (Act 40-8-7(1)[c])

A reclamation contract and surety must be provided to and approved by the Division prior to commencement of operations.

The Utah Mined Land Reclamation Act (40-8-7 (1)[c] and 40-8-14 provides the authority that all mining operations furnish and maintain reasonable surety to guarantee that the land affected is reclaimed.

The surety amount is based on the nature, extent and duration of operations. *The surety amounts are based on data from current large mine surety and are used as a general guide, along with actual site conditions.*

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Surety for small mines sites will be escalated three (3) years to the future.
Contact the Division for dollar amount required for this project.

JWP I will provide surety in the form of a: Certificate of Deposit, Letter of Credit, Surety Bond, Cash (certified funds), or Division Approved form.

VII. PERMIT FEE [Mined Land Reclamation Act 40-8-7(1)(i)]

The Utah Mined Land Reclamation Act of 1975 [40-8-7(1)(i)] provides the authority for the assessment of permitting fees. Commencing with the 1998 fiscal year (July 1 - June 30), permit fees are assessed to new and existing notices of intention, and annually thereafter, until the project disturbances are successfully reclaimed by the Permittee / Operator and released by the Division.

Small Mine Notices require a \$150.00 fee which must accompany this application or it cannot be processed by the Division.

VIII. SIGNATURE REQUIREMENT

(Please check the box if applicable and place your initials on the line provided)

JWP (X) I have enclosed the required permit fee.

JWP I understand that I am not authorized to create any surface disturbance until the surety amount is posted and approved in writing from the Division of Oil, Gas and Mining and any other authorized regulatory agency.

CERTIFICATION

I state under penalty of perjury under the laws of the state of Utah and the United States of America that:

JWP a. I have read this form and declare the information, statements and/or documentation are true, correct and complete to the best of my knowledge and belief; AND

JWP b. I commit to the reclamation of the aforementioned small mining project as required by the Utah Mined Land Reclamation Act (40-8) and the rules as specified by the Board of Oil, Gas and Mining.

JWP c. This certification must be executed by an executive officer if the applicant is a corporation; by a partner if applicant is a partnership (general or limited); owner if applicant is a sole proprietorship; member or manager if applicant is a limited liability company.

Signature: *James W. Patten* Date: *2/22/08*

Name (typed or printed): Dr. James Patten,

Title/Position (if applicable): President & CEO

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9. To the best of Red Leaf's understanding and site review, there appear to be no pre-existing, un-reclaimed, surface or underground mining disturbances located on the site.
10. Red Leaf has identified a 5 acre disturbance on the site. The proposed area for mining is 3 acres, comprised of two excavation areas each 1.5 acres in size. Excavations will not be done simultaneously. The first 1.5 acre excavation will be prepared, lined with an impermeable barrier, fitted with metal pipes and the ore deliberately place back in the impound. The liner will be placed over the top of the mound and the overburden replaced and reseeded. This process excavation and replacement will take approximately 90 days. Three (3) acres of the area will be used to store the shale and overburden during the construction phase. Once the first cell is completed the second excavation will be initiated with the displaced overburden and mined shale similarly stored on the remaining acres. Once pits are completed, there is no further need to excavate on the site. The areas identified are inclusive of all areas needed for equipment, staging, stockpiling, processing, and structures on site.
11. RLR will drill one core hole within the 5 acre site (reference Figure 2, Site 4).
12. On site gas burners used for heating will be on skids and removable at the end of the operations. No permanent structures will be erected.
13. Figure 2.0 Site 4 shows the exploration site and the proposed area of disturbance for the capsule construction. This location is inclusive of equipment. Figure 3.0 Site 4 depicts a generic site arrangement.
14. Red Leaf is currently conducting an exploration project, Southwest #1, in accordance with its permit for Exploration and Reclamation issued October 24, 2007. As part of that process, Red Leaf will be identifying appropriate markets, haul routes, production targets, sales prices and potential for annual sales. Once collected, this data will be provided to the Division of Oil Gas and Mining.
15. Exact tonnage and volume on the site will de determined based on ore density at the site and reported to the Division of Oil Gas and Mining.
16. Red Leaf Resources will conduct reclamation consistent R647-3-109.

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*(This includes
2 maps)*



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**PRECISION SYSTEMS
ENGINEERING, INC.**
9805 South 500 West
Sandy, Utah 84070 USA

Legend

5' CONTOURS

100 KVA GEN SETS
FUEL AND PRODUCT
MECHANICAL EQUIPMENT
AND LAYDOWN
OFFICE TRAILER
ROADWAYS

Notes

1. THIS DRAWING SHOWS MINING INTENT AND WILL ADJUSTED AS APPROPRIATE EACH SITE.
2. UPON COMPLETION OF SITE WORK 12" OF TOPSOIL WILL BE PLACED OVER THE SITE, EXCEPT ROADS WHICH WILL BE RESTORED TO PREVIOUSLY EXISTING CONDITIONS.

[illegible]

File Name: 50600c-103dt	KFB	KJS	DJD	07.12.14
	Dem.	Chkd.	Desn.	YY.MM.DD



Client/Project

RED LEAF RESOURCES, INC.
ECO-SHALE PROJECT

**TYPICAL 5 ACRE PRODUCTION SITES
FOR CAPSULE AREA**
Ulrich County, UT U.S.A.

Time

GENERIC CAPSULE SITE LAYOUT
PLAN AND PROFILE
FOR USE WITH SITES #1, 3, 4, 6, 7, 8, & 9

Project No.

 $1'' = 60'$

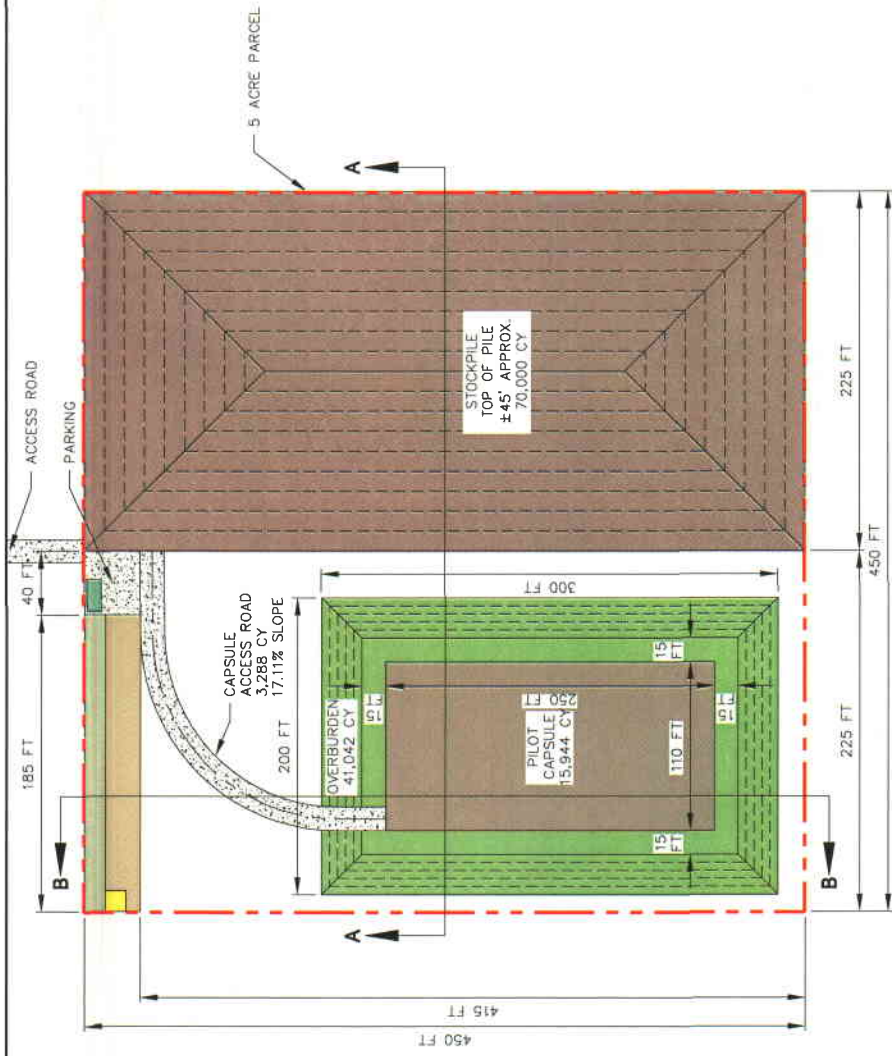
Drawing No.

Revision

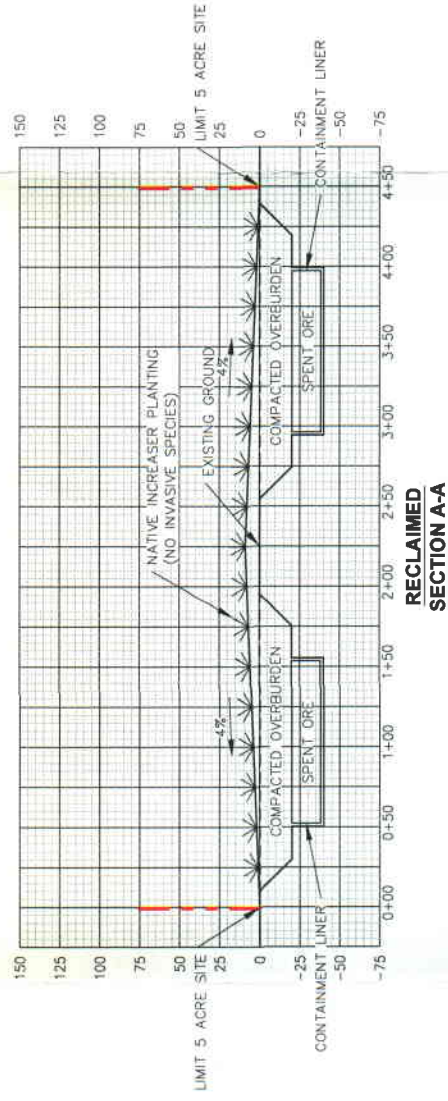
Fig. 3

10

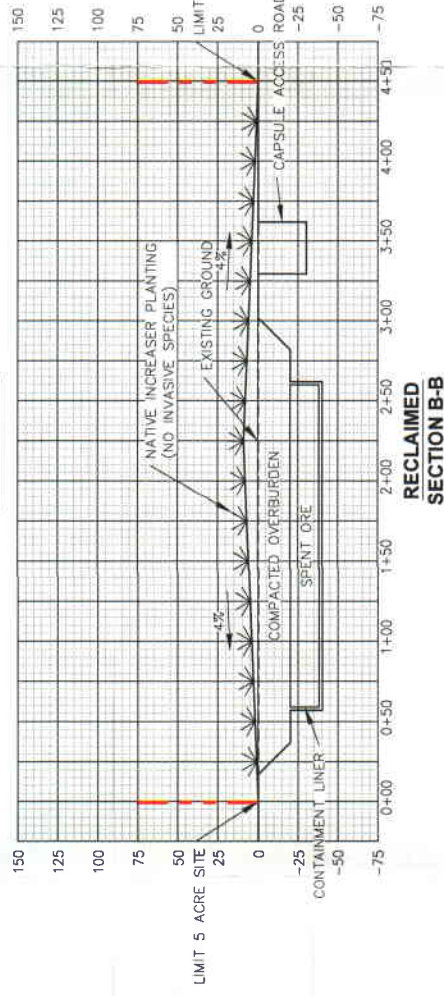
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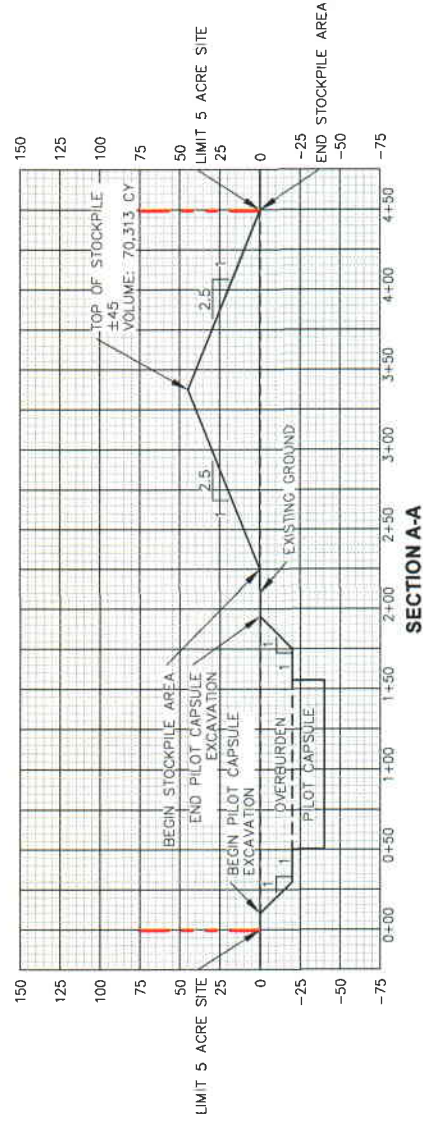
**2ND HALF OF SITE
PREPARED FOR EXTRACTION**



**RECLAIMED
SECTION A-A**



**1ST HALF OF SITE
PREPARED FOR EXTRACTION**



SECTION A-A

